

AMENDMENT TO THE SPECIFICATION

Please amend the paragraph at page 30, lines 3-12 in the Replacement Specification filed on November 14, 2002 or page 16, lines 18-27 of the originally filed Specification as follows:

Figure 32 shows an example of a one-layer puncture resistant fabric using metal guard plate. Here a layer of closely spaced, approximately identical metal guardplates is bonded to a substrate through a flexible adhesive. The substrate can be a base material or a combination of a connecting fabric and a base material. The advantage of using metal as guardplate material is that the plates can be extremely thin while still providing a high level of penetration resistance. For example, upon static loading, a 2-mil thick 304 stainless steel sheet is puncture proof against a 21 gauge medical needle because the needle fails before the metal does. This allows the approximately linear gaps between guardplates to be as narrow as two mils without sacrificing overall fabric flexibility.

Please amend the paragraph beginning on page 44, line 10 and ending on page 45, line 17 of the Replacement Specification as follows:

Figures 11 and 12 are plan and cross-sectional views, respectively, of another embodiment of the inventive fabric 90, SF16, having three identical superimposed guard plate 42 layers 44, 46, and 92, which are also spot bonded together so that the layers are capable of movement relative to other layers or substrates. As seen in Figure 11, identical equilateral hexagonal-shaped guard plates 42 are spaced from each other and oriented in a first guard plate layer 44 with a connecting

material 15. A second guard plate layer 46 is identical to layer 44, also with a connecting material 15. A third guard plate layer 92 is identical to layers 44 and 46, also with a connecting material 15. The connecting material 15 maintains the pattern and inter-plate spacing of the plates 42 of each of the layers 44, 46, and 92. The two layers 44 and 46 are superimposed and oriented to each other to minimize registration of inter-plate spacing 48 between the first and second layers 44 and 46. As seen in Figure 11, in this orientation, the inter-plate spacing 48 form a non-interconnecting network of six-pointed star-shaped apertures 50. The guard plates 42 of the third layer 92, together with the guard plates 42 of layers 44 and 46 provide complete coverage of fabric 90. Figures 12A and 12B are cross-sectional views of fabric 90 of Figure 11, showing the three layers 44, 46, and 92 of guard plates and the three connecting materials 15. Figures 11 and 12 do not show the position of bonding spots in the SF16 fabric. The bonding positions are not commensurate with the guard plate array.

That is, the pattern of bonding spots does not correspond to the patterns of the guard plate arrays. The fabric layers are bonded together to minimize vertical alignment of bonding spots in successive layers of the stack of layers. The incidental occurrence of some bonding spots vertically above each other in the different layers tends to somewhat reduce the fabric flexibility. However, using less overall bonding compensates for this incidental occurrence of vertical alignment of bonding spots throughout multiple layers.